

LAND APPLICATION SITE

R C DUNAVANT SITE

LURCD 1-5

LUNENBURG COUNTY

PART D-VI: LAND APPLICATION AGREEMENT - BIOSOLIDS AND INDUSTRIAL RESIDUALS

Landowner:

Table 1.: Parcels authorized to receive biosolids, water treatment residuals or other industrial sludges

☐ Additional parcels containing Land Application Sites are identified on Supplement A (check if applicable)

☐ The Landowner is the sole owner of the properties identified herein.
☒ The Landowner is one of multiple owners of the properties identified herein.

1. Notify the purchaser or transferee of the applicable public access and crop management restrictions no later than the date of the property transfer; and
2. Notify the Permittee of the sale within two weeks following property transfer.

The Landowner hereby grants permission to the Permittee to land apply residuals as specified below, on the agricultural sites identified above and in Exhibit A. The Landowner also grants permission for DEQ staff to conduct inspections on the land identified above, before, during or after land application of permitted residuals for the purpose of determining compliance with regulatory requirements applicable to such application.

☒ Yes ☐ No☒ Yes ☐ No☒ Yes ☐ No☒ Yes ☐ No

RC DUKAVANT JR RC DUKAVANT JR PO BOX 418 Kenbridge VA
Landowner - Printed Name, Title Signature Mailing Address & Phone Number

Recyc Systems, Inc., the Permittee, agrees to apply biosolids and/or industrial residuals on the Landowner's land in the manner authorized by the VPA Permit Regulation and in amounts not to exceed the rates identified in the nutrient management plan prepared for each land application field by a person certified in accordance with §10.1-104.2 of the Code of Virginia.

The Permittee agrees to notify the Landowner or the Landowner's designee of the proposed schedule for land application and specifically prior to any particular application to the Landowner's land. Notice shall include the source of residuals to be applied.

☐ I reviewed the document(s) assigning signatory authority to the person signing for landowner above. I will make a copy of this document(s) available to DEQ for review upon request. (Do not check this box if the landowner signs this agreement)

STumbo
Permittee - Authorized Representative
Printed Name


Signature

PO Box 562 Remington, Virginia 22734
Mailing Address

VIRGINIA POLLUTION ABATEMENT PERMIT APPLICATION: PART D-VI LAND APPLICATION AGREEMENT

Permittee: Recyc Systems, Inc

County or City: LUNenburg

Landowner: RC DUNAWANT

Landowner Site Management Requirements:

I, the Landowner, I have received a DEQ Biosolids Fact Sheet that includes information regarding regulations governing the land application of biosolids, the components of biosolids and proper handling and land application of biosolids.

I have also been expressly advised by the Permittee that the site management requirements and site access restrictions identified below must be complied with after biosolids have been applied on my property in order to protect public health, and that I am responsible for the implementation of these practices.

I agree to implement the following site management practices at each site under my ownership following the land application of biosolids at the site:

1. Notification Signs: I will not remove any signs posted by the Permittee for the purpose of identifying my field as a biosolids land application site, unless requested by the Permittee, until at least 30 days after land application at that site is completed.
2. Public Access
 - a. Public access to land with a high potential for public exposure shall be restricted for at least one year following any application of biosolids.
 - b. Public access to land with a low potential for public exposure shall be restricted for at least 30 days following any application of biosolids. No biosolids amended soil shall be excavated or removed from the site during this same period of time unless adequate provisions are made to prevent public exposure to soil, dusts or aerosols;
 - c. Turf grown on land where biosolids are applied shall not be harvested for one year after application of biosolids when the harvested turf is placed on either land with a high potential for public exposure or a lawn, unless otherwise specified by DEQ.
3. Crop Restrictions:
 - a. Food crops with harvested parts that touch the biosolids/soil mixture and are totally above the land surface shall not be harvested for 14 months after the application of biosolids.
 - b. Food crops with harvested parts below the surface of the land shall not be harvested for 20 months after the application of biosolids when the biosolids remain on the land surface for a time period of four (4) or more months prior to incorporation into the soil,
 - c. Food crops with harvested parts below the surface of the land shall not be harvested for 38 months when the biosolids remain on the land surface for a time period of less than four (4) months prior to incorporation.
 - d. Other food crops and fiber crops shall not be harvested for 30 days after the application of biosolids;
 - e. Feed crops shall not be harvested for 30 days after the application of biosolids (60 days if fed to lactating dairy animals).
4. Livestock Access Restrictions:

Following biosolids application to pasture or hayland sites:

 - a. Meat producing livestock shall not be grazed for 30 days,
 - b. Lactating dairy animals shall not be grazed for a minimum of 60 days.
 - c. Other animals shall be restricted from grazing for 30 days;
5. Supplemental commercial fertilizer or manure applications will be coordinated with the biosolids and industrial residuals applications such that the total crop needs for nutrients are not exceeded as identified in the nutrient management plan developed by a person certified in accordance with §10.1-104.2 of the Code of Virginia;
6. Tobacco, because it has been shown to accumulate cadmium, should not be grown on the Landowner's land for three years following the application of biosolids or industrial residuals which bear cadmium equal to or exceeding 0.45 pounds/acre (0.5 kilograms/hectare).

RC Dunawant
Landowner's Signature

1-21-15
Date

RC Dunawant
Farm Operator Signature

PO Box 418 Kenbridge, VA 23944
Mailing Address & Phone Number
434 917 0369

**VIRGINIA POLLUTION ABATEMENT PERMIT APPLICATION
FORM D: MUNICIPAL EFFLUENT AND BIOSOLIDS**

PART D-VI: LAND APPLICATION AGREEMENT - BIOSOLIDS AND INDUSTRIAL RESIDUALS

A. This land application agreement is made on 12/2/20 between Jane P Dunavant referred to here as "Landowner", and Recyc Systems, Inc. referred to here as the "Permittee". This agreement remains in effect until it is terminated in writing by either party or, with respect to those parcels that are retained by the Landowner in the event of a sale of one or more parcels, until ownership of all parcels changes. If ownership of individual parcels identified in this agreement changes, those parcels for which ownership has changed will no longer be authorized to receive biosolids or industrial residuals under this agreement.

Landowner:

The Landowner is the owner of record of the real property located in Lynchburg Virginia, which includes the agricultural, silvicultural or reclamation sites identified below in Table 1 and identified on the tax map(s) with county documentation identifying owners, attached as Exhibit A.

Table 1.: Parcels authorized to receive biosolids, water treatment residuals or other industrial sludges			
Tax Parcel ID	Tax Parcel ID	Tax Parcel ID	Tax Parcel ID
	<u>2A-A-9</u>	<u>36-A-10</u>	
	<u>2A-A-8</u>		

☐ Additional parcels containing Land Application Sites are identified on Supplement A (check if applicable)

Check one: ☐ The Landowner is the sole owner of the properties identified herein.
☒ The Landowner is one of multiple owners of the properties identified herein.

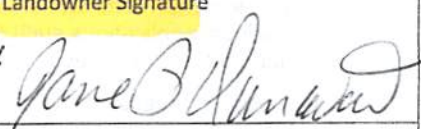
In the event that the Landowner sells or transfers all or part of the property to which biosolids have been applied within 38 months of the latest date of biosolids application, the Landowner shall:

1. Notify the purchaser or transferee of the applicable public access and crop management restrictions no later than the date of the property transfer; and
2. Notify the Permittee of the sale within two weeks following property transfer.

The Landowner has no other agreements for land application on the fields identified herein. The Landowner will notify the Permittee immediately if conditions change such that the fields are no longer available to the Permittee for application or any part of this agreement becomes invalid or the information herein contained becomes incorrect.

The Landowner hereby grants permission to the Permittee to land apply residuals as specified below, on the agricultural sites identified above and in Exhibit A. The Landowner also grants permission for DEQ staff to conduct inspections on the land identified above, before, during or after land application of permitted residuals for the purpose of determining compliance with regulatory requirements applicable to such application.

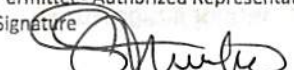
<u>Class B biosolids</u>	<u>Water treatment residuals</u>	<u>Food processing waste</u>	<u>Other industrial sludges</u>
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Printed name <u>Jane P Dunavant</u>	Mailing Address <u>PO Box 418</u> <u>Kenbridge, VA 22944</u>	Landowner Signature 
By: <u>self</u>	Phone No. <u>434 917-0215</u>	
Title* <u>owner</u>		
<input type="checkbox"/> I certify that I have authority to sign for the landowner as indicated by my title as executor, Trustee or Power of attorney, etc. <input type="checkbox"/> I certify that I am a responsible official [or officer] authorized to act on behalf of the following corporation, partnership, proprietorship, LLC, municipality, state or federal agency, etc.		

Permittee:

Recyc Systems, Inc., the Permittee, agrees to apply biosolids and/or industrial residuals on the Landowner's land in the manner authorized by the VPA Permit Regulation and in amounts not to exceed the rates identified in the nutrient management plan prepared for each land application field by a person certified in accordance with §10.1-104.2 of the Code of Virginia.

The Permittee agrees to notify the Landowner or the Landowner's designee of the proposed schedule for land application and specifically prior to any particular application to the Landowner's land. Notice shall include the source of residuals to be applied.

Printed name <u>Susan Trumbo</u>	Mailing Address <u>PO Box 562, Remington Virginia 22734</u>	Permittee- Authorized Representative Signature 
Title <u>Technical Manager</u>	Phone No. <u>540-547-3300</u>	

Permittee: Recyc Systems, Inc

County or City: Henrieville

Landowner: Jane P. Dunaway

Landowner Site Management Requirements:

I, the Landowner, I have received a DEQ Biosolids Fact Sheet that includes information regarding regulations governing the land application of biosolids, the components of biosolids and proper handling and land application of biosolids.

I have also been expressly advised by the Permittee that the site management requirements and site access restrictions identified below must be complied with after biosolids have been applied on my property in order to protect public health, and that I am responsible for the implementation of these practices.

I agree to implement the following site management practices at each site under my ownership following the land application of biosolids at the site:

1. Notification Signs: I will not remove any signs posted by the Permittee for the purpose of identifying my field as a biosolids land application site, unless requested by the Permittee, until at least 30 days after land application at that site is completed.
2. Public Access
 - a. Public access to land with a high potential for public exposure shall be restricted for at least one year following any application of biosolids.
 - b. Public access to land with a low potential for public exposure shall be restricted for at least 30 days following any application of biosolids. No biosolids amended soil shall be excavated or removed from the site during this same period of time unless adequate provisions are made to prevent public exposure to soil, dusts or aerosols;
 - c. Turf grown on land where biosolids are applied shall not be harvested for one year after application of biosolids when the harvested turf is placed on either land with a high potential for public exposure or a lawn, unless otherwise specified by DEQ.
3. Crop Restrictions:
 - a. Food crops with harvested parts that touch the biosolids/soil mixture and are totally above the land surface shall not be harvested for 14 months after the application of biosolids.
 - b. Food crops with harvested parts below the surface of the land shall not be harvested for 20 months after the application of biosolids when the biosolids remain on the land surface for a time period of four (4) or more months prior to incorporation into the soil,
 - c. Food crops with harvested parts below the surface of the land shall not be harvested for 38 months when the biosolids remain on the land surface for a time period of less than four (4) months prior to incorporation.
 - d. Other food crops and fiber crops shall not be harvested for 30 days after the application of biosolids;
 - e. Feed crops shall not be harvested for 30 days after the application of biosolids (60 days if fed to lactating dairy animals).
4. Livestock Access Restrictions:

Following biosolids application to pasture or hayland sites:

 - a. Meat producing livestock shall not be grazed for 30 days,
 - b. Lactating dairy animals shall not be grazed for a minimum of 60 days.
 - c. Other animals shall be restricted from grazing for 30 days;
5. Supplemental commercial fertilizer or manure applications will be coordinated with the biosolids and industrial residuals applications such that the total crop needs for nutrients are not exceeded as identified in the nutrient management plan developed by a person certified in accordance with §10.1-104.2 of the Code of Virginia;
6. Tobacco, because it has been shown to accumulate cadmium, should not be grown on the Landowner's land for three years following the application of biosolids or industrial residuals which bear cadmium equal to or exceeding 0.45 pounds/acre (0.5 kilograms/hectare).

Jane P. Dunaway
Landowner's Signature

12-2-20
Date

[Signature]
Operator's Signature

P.O. Box 418 Kenbridge, VA
mailing address & phone

12-2-20
Date

FARM DATA SHEET

SITE NAME:	R.C. Dunavant	COUNTY:	Lunenburg
OWNER:	R.C. Dunavant	OPERATOR:	R. Charlie Dunavant
OWNER'S ADDRESS:	P.O. Box 418 Kenbridge, VA 23944	OPERATOR'S ADDRESS:	P.O. Box 418 Kenbridge, VA 23944
OWNER'S TELEPHONE:	434-676-8029	OPERATOR'S TELEPHONE:	434-676-8029
GENERAL FARM TYPE:	Pasture/Hay	CELL PHONE:	434-917-0369
# CATTLE:	25 horses	EMAIL:	
LAGOON or SLURRY:	None	LATITUDE:	37° 00' 06"
TOPO QUAD:	Kenbridge East	LONGITUDE:	78° 07' 12"
COMMENTS:	Entrance to Field 5 is off of Starlight Lane, Rt. 649. Follow first dirt drive to the left, 'Fox Pen', to metal fox pen gate and straight through to field.		

RECYC SYSTEMS, INC

FIELD DATA SHEET

Field Identification	Gross Acres	Environmentally Sensitive Soils				Hydro Map	Tax Map #	FSA Tract #
		Water Table	Bed Rock/Shallow	Surf/Leach	Freq Flood			
LURCD 1	19.0	6	-	6	-	CU03	TM24A,P9	2188
LURCD 2	6.0	-	-	-	2D	CU03	TM24A, P8	2188
LURCD 3	18.2	-	-	-	-	CU03	TM 24A, P8	2188
LURCD 4	7.0	-	-	-	-	CU03	TM24A, P8	2188
LURCD 5	7.0	-	-	-	-	CU03	TM36A,P10	16508
TOTAL ACRES IN SITE	57.2							

R.C. Dunavant Site

[illegible]

Report Number:

2003-R224-062

Account # 70594

A&L EASTERN AGRICULTURAL LABORATORIES, INC.

7621 Whitepine Road • Richmond, Virginia 23237 • (804) 743-9401

Fax No. (804) 271-6446 • Email: office@al-labs-eastern.com



Send To: RECYC SYSTEMS INC
POB 562
REMINGTON, VA 22734

Grower: R C DUNAVANT
LUNENBURG CO

Samples Submitted By:
MARVIN MINOR

SOIL ANALYSIS REPORT

Analytical Method:
Ammonium Acetate, Bray-P

Page: 1

Date Received: 08/11/2003

Date of Analysis: 08/12/2003

Date of Report: 08/13/2003

Page: 1

Date Received: 06/11/2006

Date of Analysis: 06/12/2006

Lab Number: 18006

Table 1

Sample Number	Lab Number	Organic Matter		Phosphorus		Potassium		Magnesium		Calcium		Sodium		pH		Acidity	C.E.C.
		%	ENR lbs/A	Available ppm	Reserve Rate	K ppm	Rate	MG ppm	Rate	CA ppm	Rate	NA ppm	Rate	Soil pH	Buffer Index	H meq/100g	meq/100g
LURCE1	18006	2.5	94 M	9 L L	11 VL	109 VH		94 VH		460 M				5.8	6.85	0.8	42
LURCE2	18007	2.4	91 M	21 M	25 L	122 VH		113 VH		510 M				5.6	6.81	1.2	50
LURCE3	18008	2.2	88 M	6 VL	10 VL	153 VH		118 VH		410 M				5.8	6.85	0.8	42
LURCE4	18009	4.1	124 HH	12 L L	16 L	171 VH		119 VH		540 M				5.6	6.80	1.3	54

Sample Number	Percent Base Saturation					Nitrate	Sulfur	Zinc	Manganese	Iron	Copper	Boron	Soluble Salts	Chloride	Aluminum
	K %	Mg %	Ca %	Na %	H %	NO3-N ppm Rate	SO4-S ppm Rate	ZN ppm Rate	MN ppm Rate	FE ppm Rate	CU ppm Rate	B ppm Rate	ms/cm Rate	CL ppm Rate	AL ppm Rate
LURCE1	6.7	18.9	55.4		19.0										
LURCE2	6.3	19.0	51.4		23.3										
LURCE3	9.3	23.2	48.5		19.0										
LURCE4	8.1	18.4	50.1		23.3										

Values on this report represent the plant available nutrients in the soil.
Rating after each value: VL (Very Low), L (Low), M (Medium), H (High), VH (Very High).
ENR - Estimated Nitrogen Release. C.E.C. - Cation Exchange Capacity.

Explanation of symbols: % (percent), ppm (parts per million), lbs/A (pounds per acre),
ms/cm (milli-mhos per centimeter), meq/100g (milli-equivalent per 100 grams).
Conversions: ppm x 2 = lbs/A, Soluble Salts ms/cm x 640 = ppm.

This report applies to the sample(s) tested. Samples are retained a maximum of thirty days after testing. Soil Analysis prepared by:
A & L EASTERN AGRICULTURAL LABORATORIES, INC.

by:

C. Norman Jones
C. Norman Jones

Report Number:

2005-R076-054

Account # 70594

A&L EASTERN AGRICULTURAL LABORATORIES, INC.

7621 Whitepine Road • Richmond, Virginia 23237 • (804) 743-9401

Fax No. (804) 271-6446 • Email: office@al-labs-eastern.com



Send To: RECYC SYSTEMS INC
POB 562
REMINGTON, VA 22734

Grower: R C DUNAVANT JR
LUNENBURG

Samples Submitted By:
H MOODY

SOIL ANALYSIS REPORT

Page: 1

Date Received: 03/16/2005

Date of Analysis: 03/17/2005

Date of Report: 03/18/2005

Analytical Method:
Ammonium Acetate, Bray-P

Sample Number	Lab Number	Organic Matter		Phosphorus		Potassium	Magnesium	Calcium	Sodium	pH		Acidity	C.E.C.		
		% EN	ENR lbs/A	Available ppm RRate	Reserve ppm RRate	K ppm RRate	MG ppm RRate	CA ppm RRate	NA ppm RRate	Soil pH	Buffer Index	H meq/100g	meq/100g		
LUR001-	08111	4.2 12	124 HH	48 VH	85 VH	138 HH	106 NM	980 HH		6.1	6.88	1.0	7.1		
LUR002-	08112	4.8 14	140 VH	11 LL	15 LL	68 NM	64 HH	390 NM		5.9	6.87	0.6	32		
LUR003-	08113	1.8 8	80 NM	64 VH	75 VH	52 LL	97 VH	480 NM		6.0	6.87	0.6	39		
LUR004-	08114	2.7 9	97 NM	16 LL	34 NM	59 LL	116 VH	880 NM		6.3	6.88	0.5	5.1		
Sample Number	Percent Base Saturation					Nitrate	Sulfur	Zinc	Manganese	Iron	Copper	Boron	Soluble Salts	Chloride	Aluminum
	K %	Mg %	Ca %	Na %	H %	NO3-N ppm RRate	S04-S, A ppm RRate	ZN ppm RRate	MN ppm RRate	FE ppm RRate	CU ppm RRate	B ppm RRate	ms/cm Rate	GL ppm RRate	AL ppm RRate
LUR001-	4.9	124	688		137										
LUR002-	5.4	166	608		171										
LUR003-	3.4	205	608		154										
LUR004-	3.0	191	672		106										

Values on this report represent the plant available nutrients in the soil.

Rating after each value: VL (Very Low), L (Low), M (Medium), H (High), VH (Very High).

ENR - Estimated Nitrogen Release. C.E.C. - Cation Exchange Capacity.

Explanation of symbols: % (percent), ppm (parts per million), lbs/A (pounds per acre),
ms/cm (milli-mhos per centimeter), meq/100g (milli-equivalent per 100 grams).

Conversions: ppm x 2 = lbs/A, Soluble Salts ms/cm x 640 = ppm.

This report applies to the sample(s) tested. Samples are retained a
maximum of thirty days after testing. Soil Analysis prepared by:
A & L EASTERN AGRICULTURAL LABORATORIES, INC.

by:

C. Norman Jones
C. Norman Jones

Report Number:

R09231-0072

Account Number:

70594

A&L Eastern Laboratories, Inc.

7621 Whitepine Road Richmond, Virginia 23237 (804) 743-9401

Fax No. (804) 271-6446 Email: office@al-labs-eastern.com



Send To: RECYC SYSTEMS INC
POB 562
REMINGTON, VA 22734

Grower: R C DUNAVANT/LURCD
LUNENBURG

Submitted By: J B CRENSHAW

Farm I D:

Field I D:

SOIL ANALYSIS REPORT

Page: 1

Date Received: 8/19/2009

Date of Analysis: 8/20/2009

Date of Report: 8/21/2009

Analytical Method(s):

Mehlich III

Sample Number	Lab Number	Organic Matter			Phosphorus				Potassium		Magnesium		Calcium		Sodium		pH		Acidity		C.E.C.			
		%	ENR lbs/A	Rate	Available ppm	Reserve ppm	Rate	K ppm	Rate	MG ppm	Rate	CA ppm	Rate	NA ppm	Rate	Soil pH	Buffer Index	H meq/100g	meq/100g					
LURCD5	19796	4.6	133	M	7	VL		102	M	97	M	717	M		5.6	6.8	1.4	6.1						
Sample Number	Percent Base Saturation					Nitrate		Sulfur		Zinc		Manganese		Iron		Copper		Boron		Soluble Salts		Chloride		Aluminum
	K %	Mg %	Ca %	Na %	H %	NO3-N ppm	Rate	SO4-S ppm	Rate	ZN ppm	Rate	MN ppm	Rate	FE ppm	Rate	CU ppm	Rate	B ppm	Rate	ms/cm	Rate	CL		AL
																						ppm	Rate	ppm
LURCD5	4.3	13.3	59.1		23.3																			

ALF-Soil

Values on this report represent the plant available nutrients in the soil.
Rating after each value: VL (Very Low), L (Low), M (Medium), H (High), VH (Very High).
ENR - Estimated Nitrogen Release. C.E.C. - Cation Exchange Capacity.

Explanation of symbols: % (percent), ppm (parts per million), lbs/A (pounds per acre),
ms/cm (milli-mhos per centimeter), meq/100g (milli-equivalent per 100 grams).
Conversions: ppm x 2 = lbs/A, Soluble Salts ms/cm x 640 = ppm.

This report applies to the sample(s) tested. Samples are retained a maximum of thirty days after testing. Soil Analysis prepared by: A & L EASTERN LABORATORIES, INC.

by:

Paul Chu
Paul Chu, Ph.D.

rt l r:
R09231-0072
Account Number:
70594

A&L Eastern Laboratories, Inc.

7621 Whitepine Road Richmond, Virginia (804) 743-9401

Fax No. (804) 271-6446 Email: office@al-labs-eastern.com



To: RECYC SYSTEMS INC
POB 562
REMINGTON, VA 22734

For: R C DUNAVANT/LURCD
LUNENBURG

Copy To: J B CRENSHAW

Attn: SUSAN TRUMBO

Date Received: 08/19/2009
Date Reported: 08/21/2009

SOIL FERTILITY RECOMMENDATIONS

Page: 1

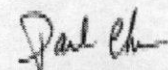
Sample ID	Intended Crop	Yield Goal	Lime Tons/A	Nitrogen N lb/A	Phosphate P2O5 lb/A	Potash K2O lb/A	Magnesium Mg lb/A	Sulfur S lb/A	Zinc Zn lb/A	Manganese Mn lb/A	Iron Fe lb/A	Copper Cu lb/A	Boron B lb/A
LURCD5	Adj pH To 6.8		2.0	0	0	0	0						

ALE-Rec

Sample LURCD5: Apply dolomitic lime to raise pH and improve the magnesium level.

"The recommendations are based on research data and experience, but NO GUARANTEE or WARRANTY expressed or implied, concerning crop performance is made."

Our reports and letters are for the exclusive and confidential use of our clients, and may not be reproduced in whole or in part, nor may any reference be made to the work, the results, or the company in any advertising, news release, or other public announcements without obtaining our prior written authorization. Copyright 1977.


Paul Chu, Ph.D.

NUTRIENT MANAGEMENT PLAN IDENTIFICATION

Operator

R.C. Dunavant
P.O. Box 418
Kenbridge, VA 23944
434-676-8029

Integrator:None

Farm Coordinates

Easting: 0, Northing: 0, zone: 17

Watershed Summary

watershed: CU03
county: Lunenburg

Nutrient Management Planner

Recyc Systems, Inc.
P.O. Box 562
Remington, VA 22734
540.547.3300
Certification Code: None

Acreage Use Summary

Total Acreage in this plan: 57.2

Cropland: 0 0.
Hayland: 32 32.
Pasture: 25. 25.2
Specialty: 0 0.

Livestock Summary

Beef Cattle 0 0
Dairy Cattle 0 0
Poultry 0 0
Swine 0 0
Other 0 0

Manure Production Balance

	Imported	Produced	Exported	Used	Net
kgals	0.	0.	0.	0.	0.
tons	0.	0.	0.	0.	0.

Plan written 9/2/2009

Valid until 9/2/2009

Signature: _____

Planner

_____ date

THE PLANNER IS NOT STATE CERTIFIED

Nutrient Management Plan Balance Sheet
(Fall, 2009-Winter, 2010)
R.C. Dunavant
Planner: Recyc Systems, Inc.

Tract: 16508 Location: Lunenburg
(N = N based, 1P = P based, 1.5P = P based at 1.5 removal, 0P = No P allowed)

Field CFSA No. /Name	Size (ac) Total/ Used	Yr.	Crop	Needs N-P-K (lbs/ac)	Leg /Man Resid	Manure/Biosid Rate & Type (season)	IT (d)	Man/Bios N-P-K (lbs/ac)	Net = Needs - appld N-P-K (lbs/ac)	Sum P rem cred	Commercial N-P-K (lbs/ac)	Notes	
1/LURCD05(N)	7/7	2009	Orchardgrass hay	70-70-95	0/0				70-70-95	N/A			
		2010	mt.	70-70-95	0/0				70-140-190	N/A			

Commercial Application Methods:
br - Broadcast ba - Banded sd - Sidedress
Notes:

Tract: 2188

Location: Lunenburg

(N = N based, 1P = P based, 1.5P = P based at 1.5 removal, 0P = No P allowed)

Field CFSA No. /Name	Size (ac) Total/ Used	Yr.	Crop	Needs N-P-K (lbs/ac)	Leg /Man Resid	Manure/Bios Rate & Type (season)	IT (d)	Man/Bios N-P-K (lbs/ac)	Net = Needs - applied N-P-K (lbs/ac)	Sum P rem cred	Commercial N-P-K (lbs/ac)	Notes	
5/LURCD01(N)	19/19	2009	Orchardgrass hay mt.	70-60-85	0/0				70-60-85	N/A			
		2010	70-60-85	0/0				70-120-170	N/A			
6/LURCD02(N)	6/6	2009	Orchardgrass hay mt.	70-50-85	0/0				70-50-85	N/A			
		2010	70-50-85	0/0				70-100-170	N/A			
2/LURCD03(N)	18/18	2009	Grass Pasture	50-100-0	0/0				50-100-0	N/A			
		2010	50-100-0	0/0				50-200-0	N/A			
1, 3/LURCD04(N)	7/7	2009	Grass Pasture	50-90-0	0/0				50-90-0	N/A			
		2010	50-90-0	0/0				50-180-0	N/A			

Commercial Application Methods:

br - Broadcast ba - Banded sd - Sidedress

Notes:

THE PLANNER IS NOT STATE CERTIFIED

R.C. Dunavant Narrative

The R.C. Dunavant Farm is located in Lunenburg County. The farm consists of hayland and pasture for their horses.

This partial plan is written for the purpose of obtaining a biosolids permit. Biosolids application has not been shown since it is uncertain when a permit will be obtained. The partial plan will be revised prior to biosolids application to obtain a target biosolids application rate.

Soil Test Summary

Tract	Field	Acre	Date	P2O5	K2O	Lab	Soil pH	Lime Date	rec. lime tons/Ac
16508	LURCD05	7	2009-Su	L+ (7 P ppm)	M (102 K ppm)	A&L (Weak Bray)	5.6		
2188	LURCD01	19	2003-Su	M- (9 P ppm)	M+ (109 K ppm)	A&L (Weak Bray)	5.8		
2188	LURCD02	6	2003-Su	M (21 P ppm)	M+ (122 K ppm)	A&L (Weak Bray)	5.6		
2188	LURCD03	18	2003-Su	L+ (6 P ppm)	H (153 K ppm)	A&L (Weak Bray)	5.8		
2188	LURCD04	7	2003-Su	M- (12 P ppm)	H (171 K ppm)	A&L (Weak Bray)	5.6		

Field Productivities for Major Crops

Tract Name	Tract/ Field	Field Name	Acres	Predominant Soil Series	Corn	Small Grain	Alfalfa	Grass Hay	Environmental Warnings
16508	16508/1	LURCD05	7	Cecil	V	IV	III	IV	
2188	2188/5	LURCD01	19	Cecil	IVb	IV	III	IV	
	2188/6	LURCD02*	6	Madison	V	IV	III	IV	High Leaching, High Slope
	2188/2	LURCD03	18	Madison	IVb	IV	III	IV	
	2188/1, 3	LURCD04	7	Madison	IVb	IV	III	IV	

* Do not apply manure or biosolids more than 30 days prior to planting. Apply commercial fertilizer nitrogen to row crops in split spring applicaions.

Yield Range

Field Productivity Group	Corn Grain Bu/Acre	Barley/Intensive Wheat Bu/Acre	Std. Wheat Bu/Acre	Alfalfa Tons/Acre	Grass/Hay Tons/Acre
I	>170	>80	>64	>6	>4.0
II	150-170	70-80	56-64	4-6	3.5-4.0
III	130-150	60-70	48-56	<4	3.0-3.5
IV	100-130	50-60	40-48	NA	<3.0
V	<100	<50	<40	NA	NA

Farm Summary Report

Plan: New Plan Fall, 2009 - Winter, 2010

Farm Name: R.C. Dunavant
Location: Lunenburg
Specialist: Recyc Systems, Inc.

Tract Name: 16508
FSA Number: 16508
Location: Lunenburg

Field Name: LURCD05
Total Acres: 7.00 **Usable Acres:** 7.00
FSA Number: 1
Tract: 16508
Location: Lunenburg
Slope Class: B **Hydrologic Group:** B

Riparian buffer width: 0 ft
Distance to stream: 0 ft

Conservation Practices:
Pasture (>75% cover)

P-Index Summary
N-based
Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

Soil Test Results:

DATE	PH	P	K	Lab
Su-2009	5.6	L+(7 P ppm)	M(102 K ppm)	A&L (Weak Bray)

Field Warnings:

Tract Name: 2188
FSA Number: 2188

Location: Lunenburg

Field Name: LURCD01

Total Acres: 19.00 Usable Acres: 19.00

FSA Number: 5

Tract: 2188

Location: Lunenburg

Slope Class: C Hydrologic Group: B

Riparian buffer width: 0 ft

Distance to stream: 0 ft

Conservation Practices:

Pasture (>75% cover)

P-Index Summary

N-based

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

Soil Test Results:

DATE	PH	P	K	Lab
Su-2003	5.8	M-(9 P ppm)	M+(109 K ppm)	A&L (Weak Bray)

Field Warnings:

Field Name: LURCD02

Total Acres: 6.00 Usable Acres: 6.00

FSA Number: 6

Tract: 2188

Location: Lunenburg

Slope Class: C Hydrologic Group: B

Riparian buffer width: 0 ft

Distance to stream: 0 ft

Conservation Practices:

Pasture (>75% cover)

P-Index Summary

N-based

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

Soil Test Results:

DATE	PH	P	K	Lab
Su-2003	5.6	M(21 P ppm)	M+(122 K ppm)	A&L (Weak Bray)

Field Warnings:

Environmentally Sensitive Soils due to:

Soils with potential for leaching based on soil texture or excessive drainage

Soils with perent slope in excess of 15%

Field Name: LURCD03

Total Acres: 18.20 Usable Acres: 18.20

FSA Number: 2

Tract: 2188

Location: Lunenburg

Slope Class: B Hydrologic Group: B

Riparian buffer width: 0 ft

Distance to stream: 0 ft

Conservation Practices:

Pasture (>75% cover)

P-Index Summary

N-based

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

Soil Test Results:

DATE	PH	P	K	Lab
Su-2003	5.8	L+(6 P ppm)	H(153 K ppm)	A&L (Weak Bray)

Field Warnings:

Field Name: LURCD04

Total Acres: 7.00 Usable Acres: 7.00

FSA Number: 1, 3

Tract: 2188

Location: Lunenburg

Slope Class: B Hydrologic Group: B

Riparian buffer width: 0 ft

Distance to stream: 0 ft

Conservation Practices:

Pasture (>75% cover)

P-Index Summary

N-based

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

Soil Test Results:

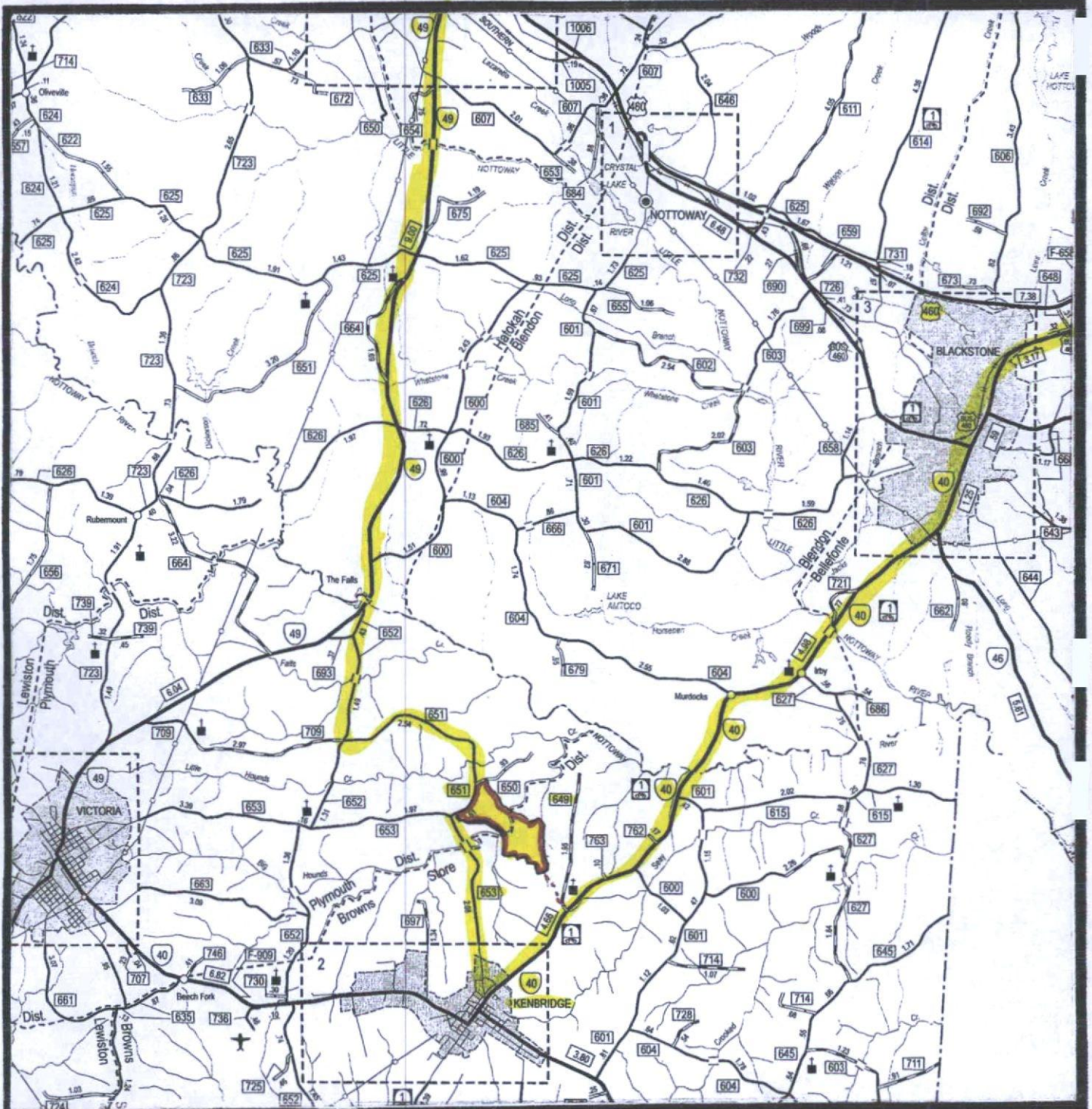
DATE	PH	P	K	Lab
Su-2003	5.6	M-(12 P ppm)	H(171 K ppm)	A&L (Weak Bray)

Field Warnings:

MAPS

Recyc Systems™ Inc.

(Biosolids Land Application)



Scale: 1 inch = 2 miles

LURCD 1-5

VICINITY MAP

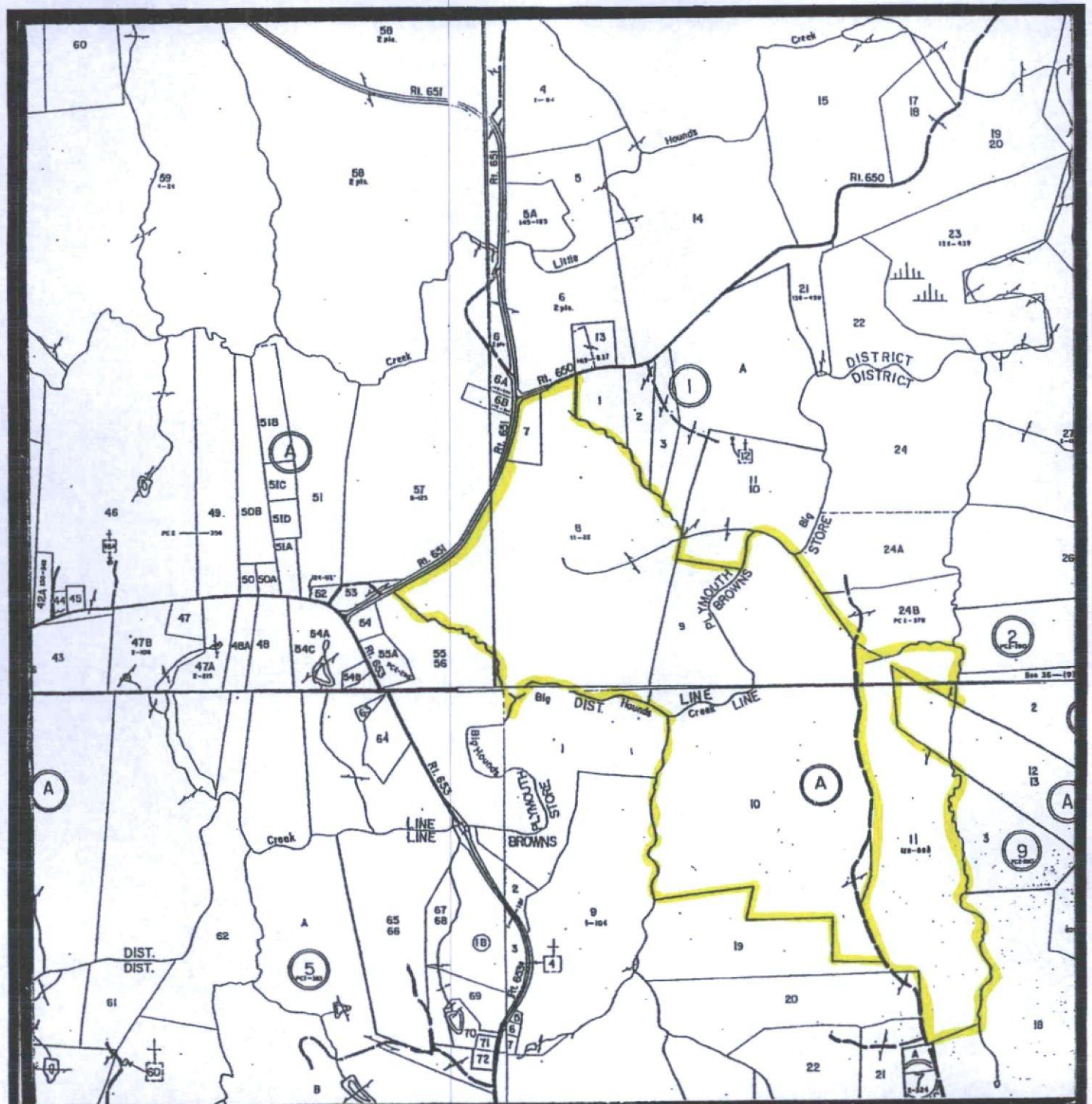


Inc. (Biosolids Land Application)



Recyc SystemsTM Inc.

(Biosolids Land Application)



Scale: 1 inch = 1450 feet

LURCD 1-5

TAX MAP

N
▲

ADJOINING LANDOWNERS

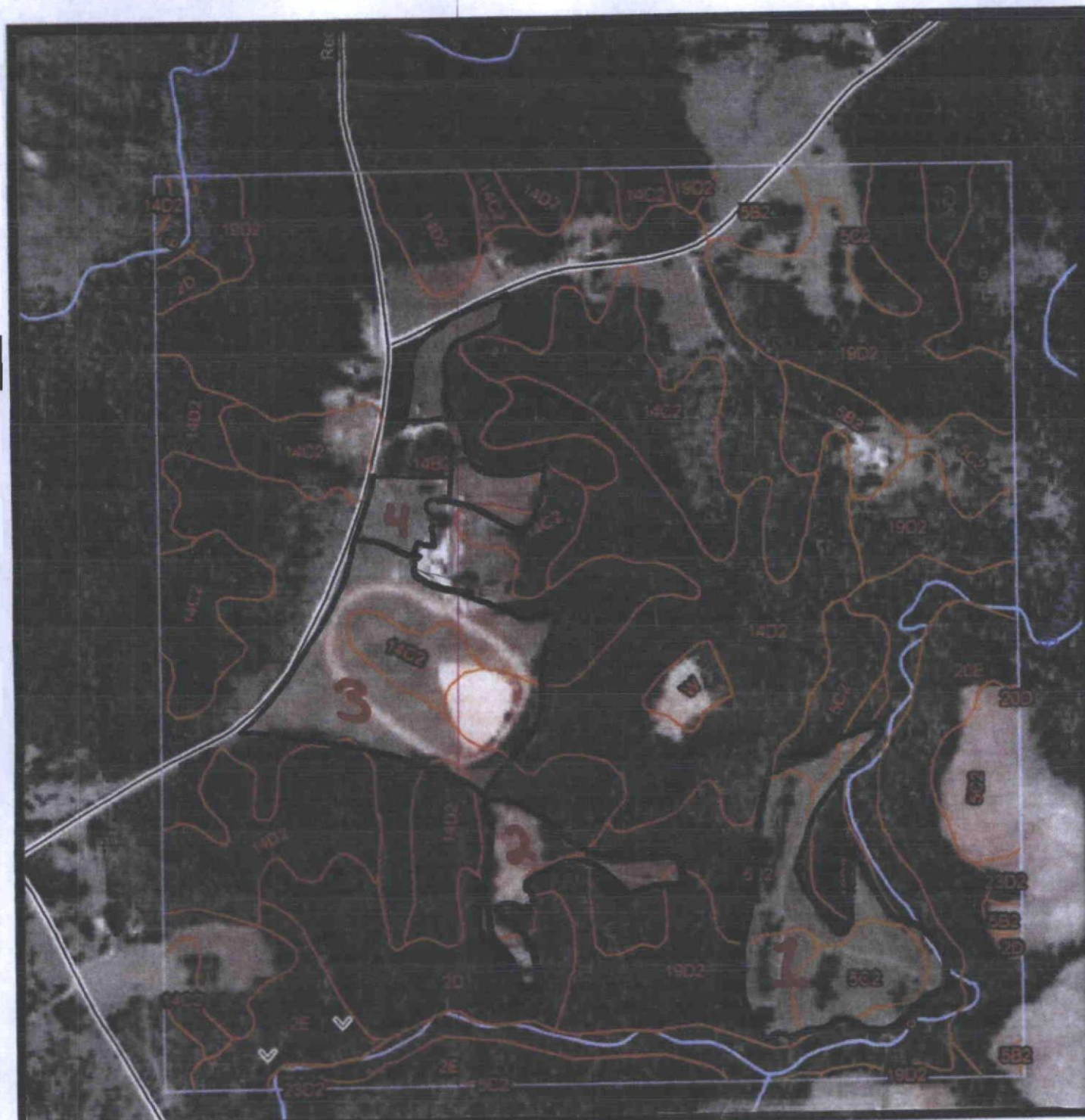
R.C. DUNNAVANT, JR SITE

LUNENBURG COUNTY

Tax Map	Parcel ##	Owner Name(s)
23(A)	55	Joel A. or Joyce A. Manning
23(A)	56	Joel A. or Joyce A. Manning
24	6B	Robert G. or Judy S. Bridges
24	6C	Robert G. or Judy S. Bridges
24(1)	1	Ronnie Edward Crallie & Wanda Crallie Mateen
24(1)	10A	Emma C. Lewis
24(1)	2	Clifton Seay
24(1)	24B	Joseph W. or Krista L. Arnette
24(1)	24C	Gary H. or Kathleen M. Baarlsen
24(1)	3	Hasselline B. or Dr. Lewis
24(1)	A	Richard D. Seay, Sr. Sr.
24A	6	Richard D. & Bettie Seay
36(A)	1	Randy R. or Theresa L. Hudson
36(A)	9	Randy R. or Theresa L. Hudson
36(A)	19	Curtis Garrett

Recyc SystemsTM Inc.

(Biosolids Land Application)



Scale: 1 inch = 660 feet

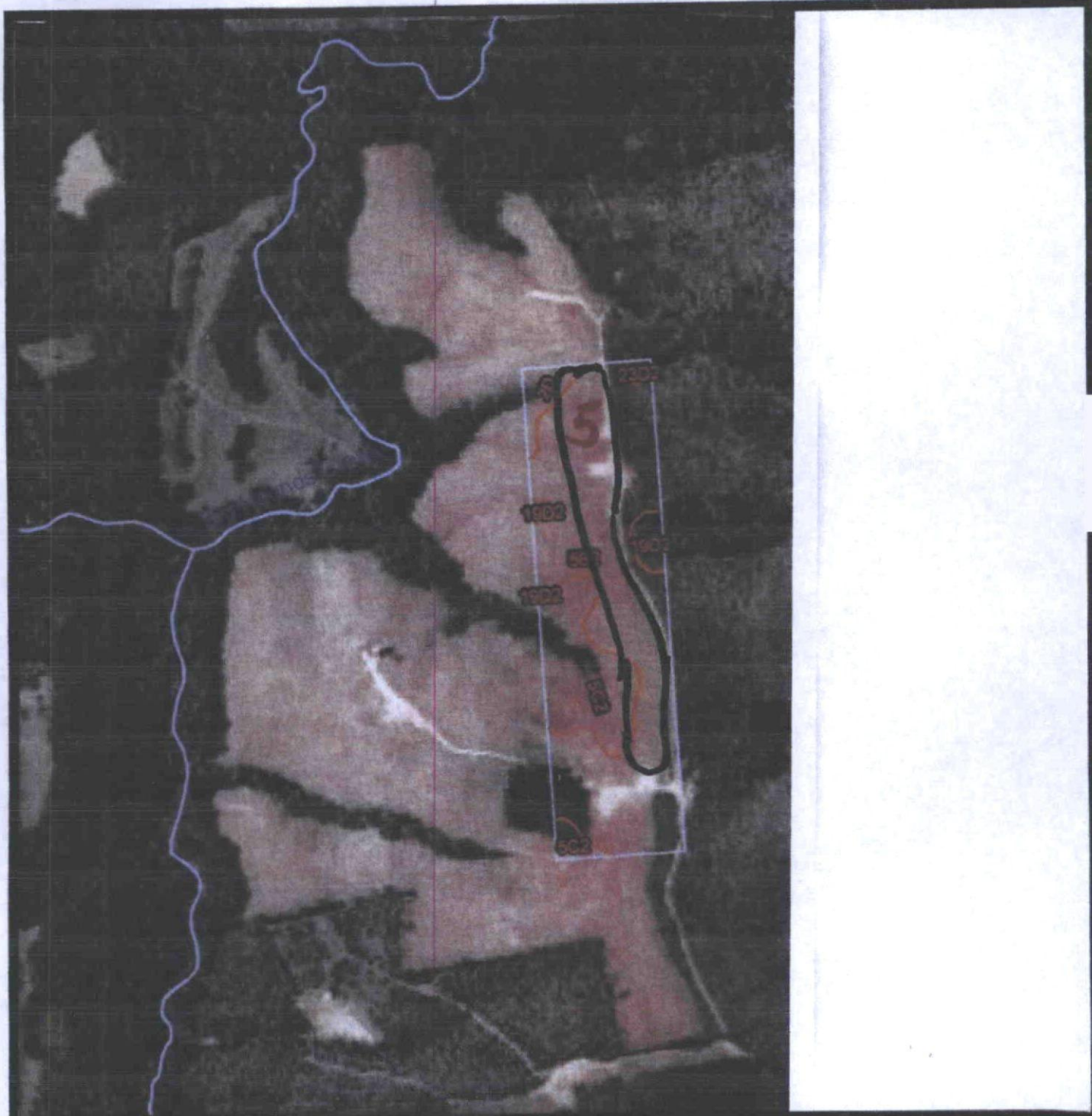
LURCD 1-4

SOIL MAP



Recyc SystemsTM Inc.

(Biosolids Land Application)



Scale: 1 inch = 660 feet LURCD 5

SOIL MAP



Recyc SystemsTM Inc.

(Biosolids Land Application)



Scale: 1 inch = 660 feet

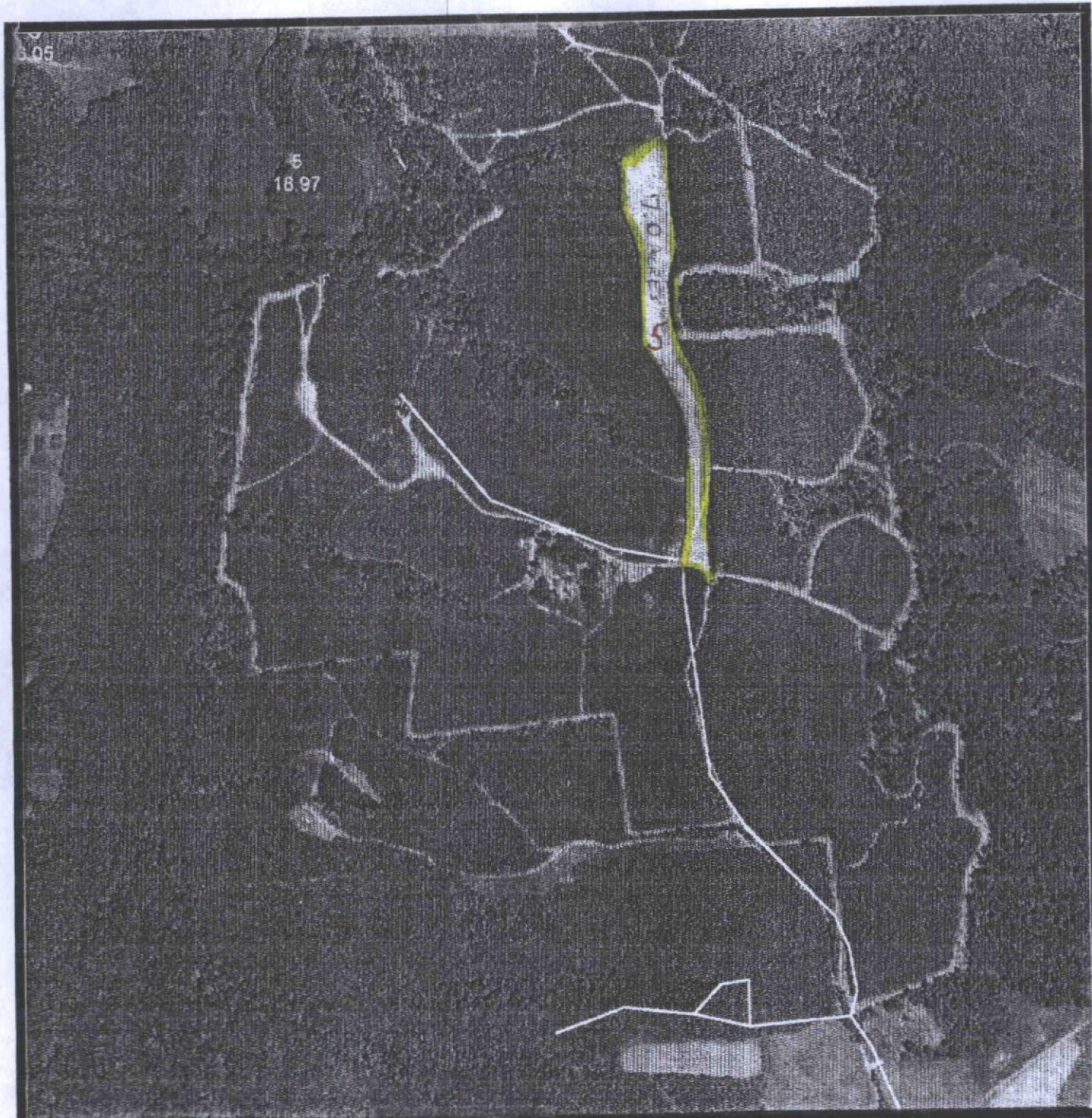
LURCD 1-4

AERIAL MAP



Recyc SystemsTM Inc.

(Biosolids Land Application)



Scale:

1 inch = 660 feet

LURCD 5

AERIAL MAP



Legend for Site Plan



House and Well



Well



Perennial Streams & Surface Waters



Wet Spot



Intermittent Stream / Drainage Ditch



Trees and Woods



Private Drive



Rock / Rocky Area



Sinkhole



Severely Eroded Spot



State Road



Field Boundary / Fence



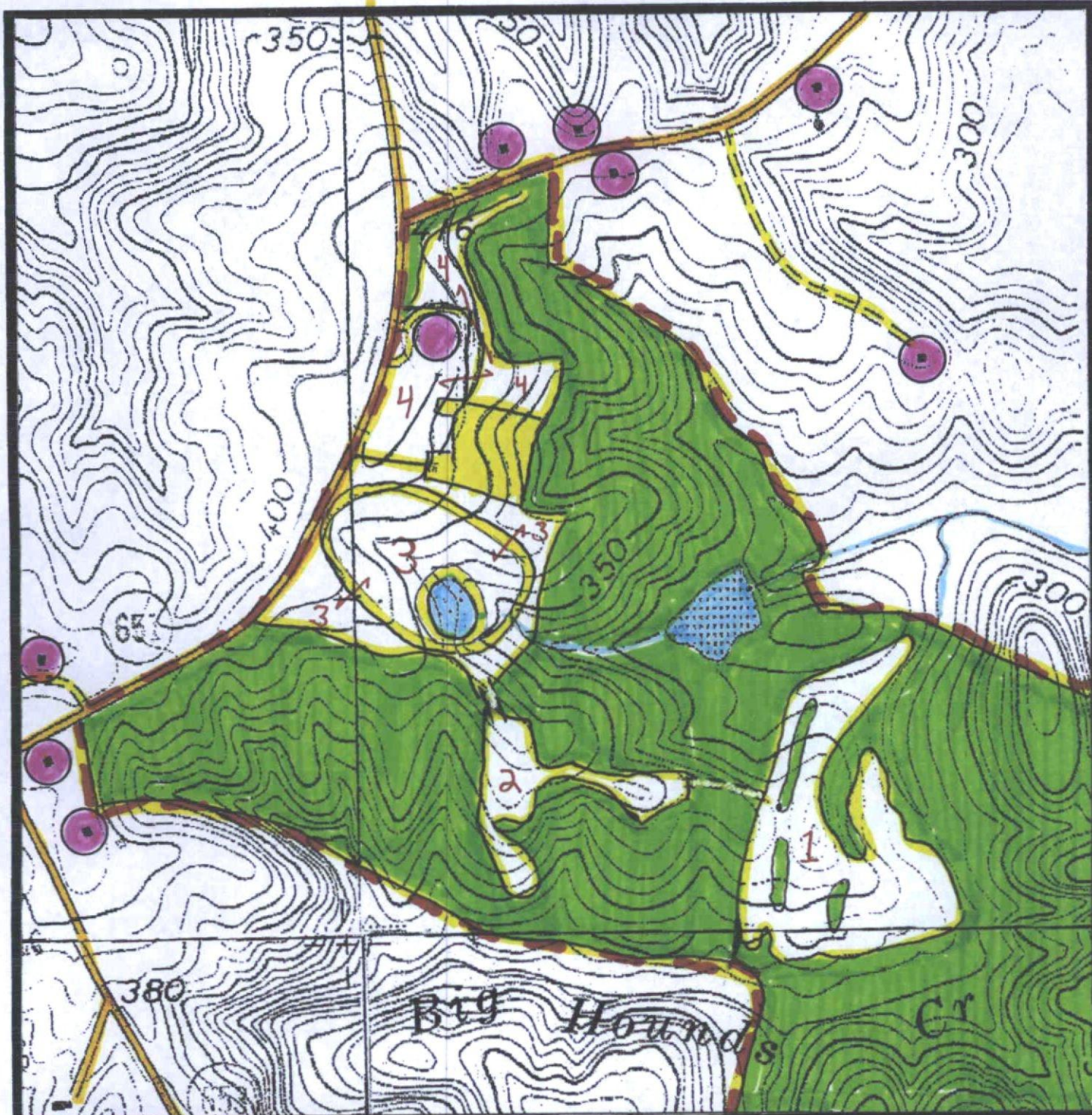
Property Line



Slope



Frequent Flooded Soil (seasonal)



Scale: 1 inch = 660 feet

LURCD 1-4

SITE PLAN



Recyc SystemsTM Inc.

(Biosolids Land Application)



Scale:

1 inch = 660 feet

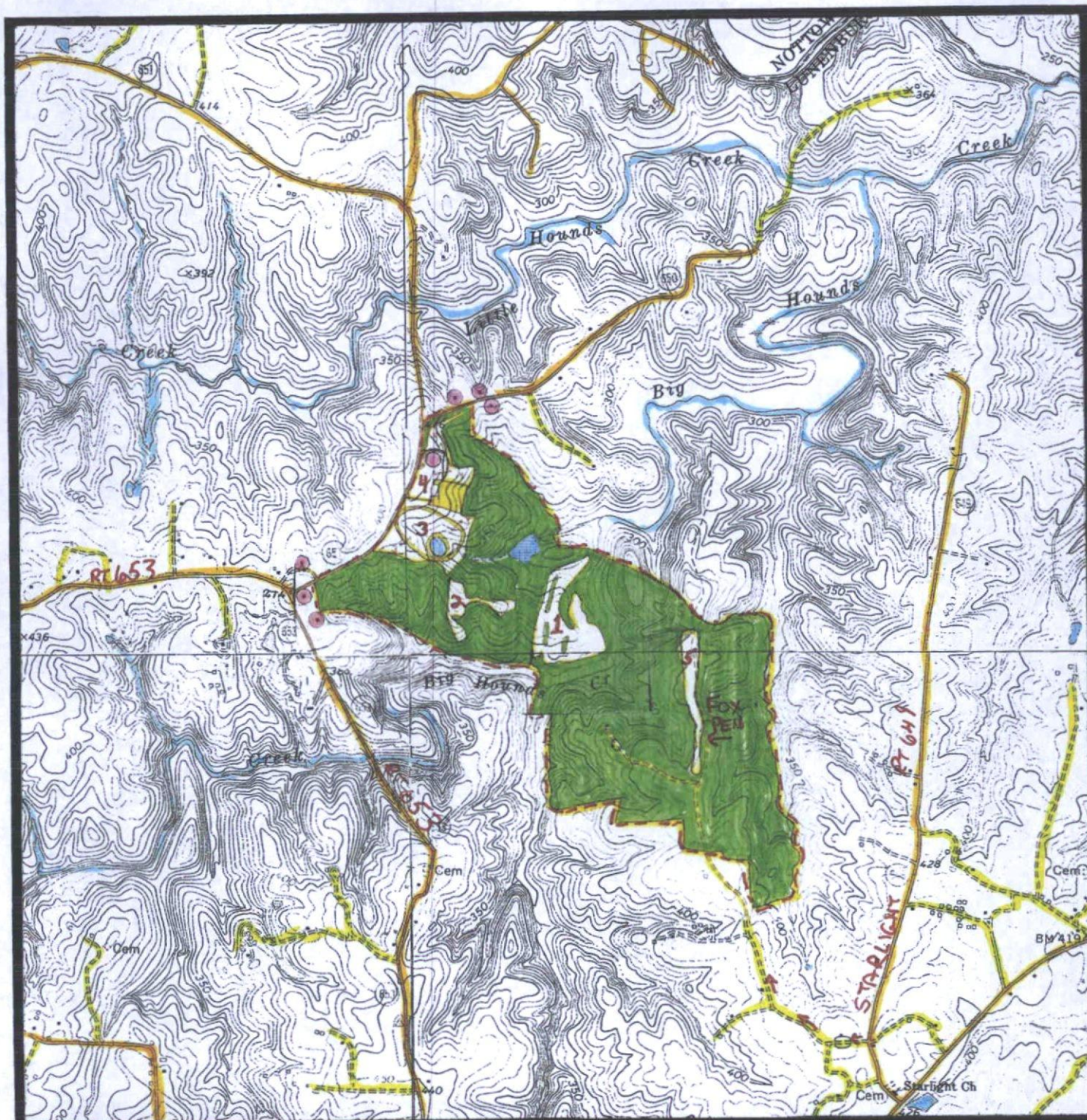
LURCD 5

SITE PLAN

N
▲

Recyc SystemsTM Inc.

(Biosolids Land Application)



Scale: 1 inch = 2,000 feet

LURCD 1-5

TOPOGRAPHIC MAP

